IN MEMORIAM.

SIR MICHAEL FOSTER.

The month of October, in the year 1870, marks an epoch in the history of the University, for at that time Michael Foster came to Cambridge and a new era of scientific activity began. He was not invited here by the University, no new professorship was founded, but his advent was due to the far-sightedness and liberality of Trinity College which saw that the time had come for a separate teacher in physiology. Up to then Professor Humphry, who held the post of Professor of Anatomy and Physiology, had given a course of lectures on physiology as well as on anatomy, and had made the first small beginning of any practical instruction in the subject by exhibiting a number of microscopical preparations on a few evenings in the year. Trinity College, in the person I believe of W. G. Clark, approached Huxley and asked his advice. He immediately, without hesitation, answered: 'I know the very man for you, a young fellow of the name of Foster, at University College.' Foster consented to come and started his teaching here as Trinity Praelector in Physiology, unrecognised by the University, living, as he said, in it but not of it. Not being a member of the electoral roll he had no direct influence on its boards of studies, no vote in its senate. Yet his influence quickly made itself felt, for, as I well remember, but few days passed on which Coutts Trotter, Henry Sidgwick, J. W. Clark, and later on Frank Balfour, did not come in to his private room to talk over some of the questions of the day and thus through them he was able to give effect to his ideas.

This anomalous condition of things lasted for thirteen years, until, as the result of the Royal Commission of 1881, a chair of physiology was founded in 1883 and Foster appointed as the first professor.

The magnitude of Foster's work can be appreciated only by recalling the position of Physiology and indeed of the biological sciences when he first came. Physiology was looked upon entirely as a medical subject, and was taught solely by means of lectures. Save at University College where Foster's teacher, Sharpey, kept it alive, physiology throughout Great Britain was a dead subject. In Cambridge itself Botany was limited almost completely to the study of external form There was an herbarium but no laboratory. Comparative Anatomy was without a laboratory and was limited to such teaching as museum specimens could afford. Foster came imbued with the ideas of his great teachers Sharpey and Huxley. Full of enthusiasm for his subject, not as a part of medical learning but as a portion of the great science of biology, he came with the full determination, as I remember his saying to me, of making the Cambridge biological school the foremost school in the British Empire The completeness with which he realised his aim is now matter of common knowledge.

To the half dozen of us who attended his first course of lectures they came as a revelation. The charm of his manner, the clearness of his argument, and the absolute novelty of what he taught, for there was nothing at all like it in the books, combined to produce an impression on my mind, and on that of all of us, that here was a lecturer greater than any we had ever known, a subject worthy of the lecturer, and a man whose disciple one was constrained to be.

In those early days, when the number of students was small, so great was the spell of his personality that man after man was willing to devote himself to the cause which Foster had so much at heart without thought of payment or position. Thus, with the hearty co-operation of Professor Newton, Foster was enabled to start a new department of morphology under Balfour, of botany under Vines and Frank Darwin, and separate physiological departments of physiological chemistry under Lea, and of histology under Langley. Well do I remember Foster discussing with Balfour his future career. Taking an egg he showed him the embryo inside and suggested to him that here was a subject well worth investigation.

In 1870 the University gave one of two small rooms which are now merged in the Philosophical Library. The other room was used by the Professor of Sanscrit. How we longed for that room! and what tricks we students, unknown to Foster, devised in order to obtain it! Six years later the importance of the work was recognised by the University in a Grace, passed March 30, 1876, which recommended the erection of rooms for Comparative Anatomy and Physiology at a cost of £8,750. Owing to various accidental delays the buildings were actually opened only in 1879.

Foster's influence was by no means confined to England. Always keenly alive to the brotherhood of science, and desirous of joining together in one friendly community all workers in physiology of whatever nation, he mooted the idea of an International Congress of Physiologists in 1888. The suggestion was warmly taken up in Germany, and the first Congress was held at Basle in 1889. Foster was greatly liked by foreign physiologists. At the International Congress of 1901 he was elected Perpetual Honorary President, and the event was signalised by an outburst of applause which it seemed would never cease.

Previously in England he had started the Physiological Society for the purpose of bringing together all English physiologists, and in both cases he insisted from the outset that the communications submitted should consist of the demonstration of new facts rather than of the reading of papers.

The same spirit was shown in starting the Journal of Physiology, on the title page of which appeared as his coadjutors the names of American as well as of English physiologists. The Journal was run on dignified lines. Paper, typography and figures were so good as constantly to excite admiration abroad, although this policy involved considerable financial loss to the editor.

In the course of a visit to America I was much impressed by the respect and reverence shown for Foster. There he is regarded as the founder of modern physiology. The late Newell Martin, one of his first pupils, was sent by him to the Johns Hopkins University as their first Professor of Physiology, and through his influence Foster's methods and teaching took root and spread. Even in Germany those methods are coming more and more into vogue.

Foster's greatest contribution to physiological literature undoubtedly is his text book, which was published in 1876 and ran through six editions. It was novel, both in style and matter, and was written in an easy and fascinating manner. It was republished in America, and translated into more than one European language, and Foster used to repeat with great glee the remark made to him by a waiter at one of the hotels in Yellowstone Park: 'Waal Professor Foster, I'm vurry glad to make your acquaintance. Many and many's the weary hour I have spent over your book.'

In 1872 he was elected a fellow of the Royal Society, and in 1881 he succeeded Huxley, who became President, as one of its secretaries. He held this post until 1903.

In this position he was able to do great things for science generally, and perhaps not the least thing was the establishment of close, confidential and frequent relations between the Royal Society and the Government Departments.

Foster believed this to be of advantage both to the country and to the Society, many of whose members disagreed with him on this point. Whether right or wrong in his judgment he carried the policy through until the Society has become, as a matter of routine, expert adviser to a number of Government departments. To those who know the facts the most striking thing must ever be the great reliance placed on him personally. To some of the Departments he seemed to stand for the Royal Society itself.

Foster's success sprang in the first instance from his personal charm. He was gifted with a quick and ready sympathy which commanded the confidence of younger men not only in respect to their scientific studies but also as regards more private and personal matters. He was a friend to whom one felt any trouble could be taken, with whom any difficulty could be discussed.

He found fitting masters in Sharpey and Huxley, and from them and from his own sympathetic nature came a broad view of physiology as part of a great scientific subject. The unity of knowledge for which Huxley strove was always present to him.

But his great characteristic, which more than anything else conduced to his success, was his full recognition of the value of the experimental method in teaching as well as in research. He always insisted that lectures alone were barren, that every fact, as far as it was possible, must be demonstrated to the student. From the very outset he inculcated a spirit of research amongst his men. If knowledge is not progressive he believed it most certainly would be regressive. 'If the research be healthy,' he used to say, 'the teaching will follow.' In his large hearted devotion to science he was wonderfully unselfish and indifferent to pecuniary considerations. So long as he could help others and further science he was content.

Foster was an impulsive man. He very rapidly decided and acted. Especially quickly did he come to a conclusion about a man's character and ability. He was a discoverer of men, rather than of facts—of biologists, rather than of facts and theories in biology. The judgment of a man once thus rapidly formed he seemed never to relinquish. He then trusted or distrusted the man for ever. He impartially helped scores of younger workers and therefore perforce impeded the progress of hundreds of other workers; but in the very great majority of cases his judgment of them was curiously correct.

In these few lines I have tried to confine myself to the more academic aspect of Foster's work, the service he rendered to pure science. As Member of Parliament, as plain member, as Secretary or as President of the British Association, and as member of various Royal Commissions he did much good work which I have no space even to touch upon.

W. H. Gaskell.

FRENCH COMEDY AT CAMBRIDGE.*

II. LE MÉDECIN MALGRÉ LUI.

A Doctor Perforce (Le Médecin Malgré Lui), in prose, the nearly contemporary work of Molière, is a play not perhaps better than *Les Plaideurs*—there is not much point in a comparison of different merits—but more substantial, nearer to the ground of nature, and far more significant, even in the curtailed form imposed upon it by the fiat of the great Parisian theatre, and still more so, as Molière left it. It turns upon the adventures of a wood-cutter, an intelligent, though disorderly, rapscallion with the faint remains of a literary education, who is compelled to assume the part of a medical man. This involuntary promotion to the learned faculty he owes to his wife. The admirable pair have a matrimonial quarrel, in which, according to the rules, the woman wins with the tongue, and the man redresses the balance with a stick. While she is meditating revenge, she is visited by some persons belonging to the household of a country-gentleman, whose daughter has a malady defying all remedies, and who has sent out these emissaries to discover, if possible, some new adviser. The woman seizes the occasion, and informs them that there is indeed, in this very forest, a man who possesses secrets of healing quite superhuman; but that he will not practice, or even acknowledge his science, except under compulsion; he prefers the humble occupation of a wood-cutter. She then directs them to the place where her husband is at work; and they soon convince him that, if he would not be beaten to death, a doctor, for this time at least, he will have to be. Indeed, being quick-witted and unscrupulous, when once he has consented, he begins to smell profit in the business. Arriving at the home of the patient, he discovers first, to his infinite satisfaction, that his employers, the relatives and friends of the suffering lady, *know not one word of Latin.* Since he himself does know just the sound of that language, and recollects a few scraps of scientific jargon, the preliminary mummeries, for a ready tongue and brain, are under these circumstances not difficult—and highly enjoyable. And before there is much risk of an exposure, his embarrassment is relieved by an interview with the young lady's lover, who explains that her malady, a strange inability to articulate, is a mere pretence. She has adopted it as a desperate way to delay her union with a disagreeable suitor, for whom she is destined by her father, and to give opportunity, or at least time, for some diversion in favour of himself, the man of her choice. As the lover is not personally known to the lady's papa, the course of imposture runs smoothly enough. By the joint efforts of the doctor and his apothecary (the lover in disguise), the girl recovers her speech—and elopes. Their flight is discovered however before the chief impostor can decamp; and he is about to go to prison, when they luckily come back. The gentleman has suddenly succeeded (by the providence of the theatre) to a fortune which makes him a better match than his rival, and he therefore prefers, with cheap virtue, to take the hand of his lady in a more regular way.

The character of Sganarelle, the improvised and improvising quack in this play, is so familiar, even (we may say) to those who never heard of him, that, since he practically makes the piece, description or exposition would be superfluous. Perhaps all literature does not contain any saying more hard-worked in conversation than his reply, when it is respectfully remarked that the heart, which he seems to place on the right side of the body, has been held to be rather on the left: 'Yes, it used to be so; but *we have changed all that.*' Or again, 'C'est toujours la faute de celui qui meurt': or 'La colère d'un médecin est plus à craindre qu'on ne peut croire.' Some of the conversations, when one opens upon

* Continued from previous number.